CLAIMS

1. (Currently Amended) A positive temperature coefficient of resistance current limiting assembly adapted for connecting to both nonlocking-type electrically isolated plugs and lockable-type electrically isolated plugs, comprising:

a positive temperature coefficient of resistance current limiting device having a body having a top , [[having]] at least two adjacent sockets each having upstanding walls and at least one male terminal therein ~~therein~~, a capacitor disposed on said top and a positive temperature coefficient of resistance resistor,

at least one male conductive terminal in each of the at least two adjacent sockets , each of said [[sockets]] male terminals being at least configured to receive a female conductive connection element on an electrically isolated plug, ~~said plug having an insulating open-ended sheath surrounding at least a portion of each of said female conductive elements,~~

one of said two sockets having an interior cross-sectional size or shape that is different from the interior cross-sectional size or shape of the other socket and at least one of said sockets further being asymmetrical to facilitate connection of a cooperatively-shaped electrically isolated plug in only the proper orientation, and

an engageable member disposed on an upstanding wall of at least one of said sockets and outside of said sockets such that it will not interfere with insertion of a single-conductor electrically isolated plug into either of said sockets, the engageable member further being positioned so its middle is disposed generally between lines extending axially through said male terminals when viewed from the side but offset to the side of a line extending between said male terminals when viewed from above, said engageable member further having a lower edge adapted to lockably engage a locking tab of a lockable electrically isolated plug when a lockable electrically isolated plug is inserted into said sockets.

~~said sockets each having peripheral walls and being adapted to receive the female connection elements,~~

~~each of said male conductive terminals having an upwardly extending axis and an end disposed below an upper edge of said peripheral walls, said peripheral walls having sufficient height such that when said electrically isolated plug is fully received into its respective socket and said~~

~~female conductive connection element is received onto said male conductive terminal, at least a portion of each of said sheaths is below said top edges of said peripheral wall, and~~

~~an engagement member disposed on at a side of least one of said peripheral walls and having an engagement edge that is at least configured to engage a locking tab of said electrically isolated plug, wherein at least a portion of said engagement edge and at least a portion of each upwardly extending axis of each of said male conductive terminals are located at apexes of a non-oblique triangle in a plane orthogonal to each upwardly extending axis of each of said male conductive terminals~~.

2. (Previously Presented) The assembly of Claim 1, wherein the capacitor has at least one male connector and there is at least one female receptacle on the positive temperature coefficient of resistance current limiting device for receiving the at least one male connector of the capacitor.

3. (Previously Presented) The assembly of Claim 1 wherein the electrically isolated plug further comprises a flexible arm with a locking tab of a size and shape such that the upper surface of the locking tab can be retainingly secured against the underside of the engagement member.

4. (Previously Presented) The assembly of Claim 3 wherein the flexible arm can be flexed so as to release the locking tab from pressing up against the underside of the engagement member.

5. (Currently Amended) The assembly of Claim 1, wherein the male connection terminal in the socket on the positive temperature coefficient of resistance current limiting device is electrically isolated from adjoining conductive parts ~~when said electrically isolated plug is fully received into said socket and said female conductive connection element received onto said male conductive terminal with at least a portion of said sheath inside said socket~~.

6. (Currently Amended) The assembly of Claim 1, wherein each of the at least two adjacent sockets on the positive temperature coefficient of resistance current limiting device ~~being~~ are of a different [[shape]] size to fit different [[shape]] size plugs to facilitate connection of the correct plug to the correct male conductive terminal.

7. (Previously Presented) The assembly of Claim 1, wherein the male conductive terminal is attached to at least one plate made of conductive material.

8. (Previously Presented) The assembly of Claim 1, wherein the male conductive terminal is attached to at least one plate made of conductive material by means of welding.

9. (Previously Presented) The assembly of Claim 1, wherein the male conductive terminal is attached to at least one plate made of conductive material by means of soldering.

10. (Previously Presented) The assembly of Claim 1 wherein said at least one male conductive terminal is attached to a portion of a plate from which a previously existing male conductive terminal has been cuttingly removed.

11. (Withdrawn) A method for connecting a positive temperature coefficient of resistance resistor/overload device to electrically conductive wire, the method comprising:

providing a positive temperature coefficient of resistance resistor/overload device with at least one male conductive terminal connected to a plate protruding from a socket, and an angle protruding outwardly from the body of the positive temperature coefficient of resistance resistor/overload device in a plane parallel to the top of the device adjacent to the at least one socket;

attaching a plug assembly with at least one female conductive element, and at least one electrically isolated female wire receptacle for receiving electrical wire to the electrically conductive wire; and

inserting the plug assembly into the positive temperature coefficient of resistance resistor/overload device such that the at least one female conductive element on the plug

assembly is fittingly engaged on the corresponding male conductive terminal in the socket on the positive temperature coefficient of resistance resistor/overload device.

12. (Withdrawn) The method of Claim 11 further comprising connecting a capacitor having at least one male connector into an at least one electrically isolated female receptacle for receiving the capacitor on the positive temperature coefficient of resistance resistor/overload device.

13. (Withdrawn) The method of Claim 11 further comprising lockingly engaging the topmost surface of a locking tab on a flexible arm on the plug assembly under the underside of the angle on the positive temperature coefficient of resistance resistor/overload device.

14. (Withdrawn) The method of Claim 13 further comprising flexing the flexible arm so as to release the locking tab from pressing up against the underside of the angle.

15. (Withdrawn) The method of Claim 11 further comprising making each male conductive element socket on the positive temperature coefficient of resistance resistor/overload of a different size from any other male conductive element socket on the positive temperature coefficient of resistance resistor/overload.

16. (Withdrawn) The method of Claim 11 further comprising making the sockets on the positive temperature coefficient of resistance resistor/overload device electrically isolated from adjoining conductive parts.

17. (Withdrawn) The method of Claim 11 further comprising securing the male conductive terminal to at least one plate by means of welding.

18. (Withdrawn) The method of Claim 11 further comprising securing the male conductive terminal to at least one plate by means of soldering.

19. (Withdrawn) The method of Claim 11 further comprising securing the male conductive terminal to at least one plate by means of adhesive bonding.

20. (Withdrawn) The method of Claim 11 further comprising cuttingly removing at least one male conductive terminal from at least one plate.

21. (Withdrawn) A method for disconnecting a positive temperature coefficient of resistance resistor/overload device from electrically conductive wires in a plug assembly, the method comprising:

disengaging a locking tab on a flexible arm on the plug assembly from an angle on the positive temperature coefficient of resistance resistor/overload device by flexing the arm until the locking tab is released from under the angle;

disengaging the plug assembly from at least one socket containing a male conductive element on a positive temperature coefficient of resistance resistor/overload device; and

completely disconnecting the plug assembly from the positive temperature coefficient of resistance resistor/overload device such that no electrical connection continues to exist between the plug assembly and the positive temperature coefficient of resistance resistor/overload device.

22. (Previously Presented) The assembly of Claim 1 wherein there is at least one upstanding wall disposed between said two male terminals.

23. (Previously Presented) The assembly of Claim 22 wherein said at least one upstanding wall is shared by both sockets.